**RMAN BACKUP SCRIPT**

# ###############################################

# VARIABLES To be Modified by the user to match the Environment:

# ###############################################

# INSTANCE Name: [Replace ${ORACLE\_SID} with your instance SID]

ORACLE\_SID=BAWDB1

# ORACLE\_HOME Location: [Replace ${ORACLE\_HOME} with the right ORACLE\_HOME path]

ORACLE\_BASE=/u02/app/oracle/

ORACLE\_HOME=$ORACLE\_BASE/product/19.3.0/dbhome\_1

export PATH=/usr/sbin:$PATH

export PATH=$ORACLE\_HOME/bin:$PATH

# Backup Location: [Replace /backup/rmanfull with the backup location path]

BACKUPLOC=+BACKUP/bawdb

# Backup LOG location:

RMANLOG=/dbbkp/backup/RMAN\_bawdb.log

# COMPRESSED BACKUP option:[Y|N] [Default ENABLED]

COMPRESSION=Y

# Perform Maintenance based on below Backup & Archivelog Retention: [Y|N] [Default DISABLED]

MAINTENANCEFLAG=N

# Backup Retention "In Days": [Backups older than this retention will be deleted]

BKP\_RETENTION=2

# Archives Deletion "In Days": [Archivelogs older than this retention will be deleted]

ARCH\_RETENTION=2

# ##################

# GENERIC VARIABLES: [Can be left without modification]

# ##################

# MAX BACKUP Piece Size: [Must be BIGGER than the size of the biggest datafile in the database]

MAX\_BKP\_PIECE\_SIZE=33g

# Show the full DATE and TIME details in the backup log:

NLS\_DATE\_FORMAT='DD-Mon-YYYY HH24:MI:SS'

export ORACLE\_SID

export ORACLE\_HOME

export BACKUPLOC

export COMPRESSION

export BKP\_RETENTION

export ARCH\_RETENTION

export MAX\_BKP\_PIECE\_SIZE

export RMANLOG

export NLS\_DATE\_FORMAT

export MAINTENANCEFLAG

# Check the selected COMPRESSION option:

case ${COMPRESSION} in

Y|y|YES|Yes|yes|ON|on)

COMPRESSED\_BKP="AS COMPRESSED BACKUPSET"

export COMPRESSED\_BKP

;;

\*)

COMPRESSED\_BKP=""

export COMPRESSED\_BKP

;;

esac

# Check the selected MAINTENANCE option:

case ${MAINTENANCEFLAG} in

Y|y|YES|Yes|yes|ON|on)

HASH\_MAINT=""

export HASH\_MAINT

;;

\*)

HASH\_MAINT="#"

export COMPRESSED\_BKP

;;

esac

# Append the date to the backup log for each script execution:

echo "----------------------------" >> ${RMANLOG}

date >> ${RMANLOG}

echo "----------------------------" >> ${RMANLOG}

# ###################

# RMAN SCRIPT Section:

# ###################

${ORACLE\_HOME}/bin/rman target / msglog=${RMANLOG} <<EOF

# Configuration Section:

# ---------------------

${HASH\_MAINT}CONFIGURE BACKUP OPTIMIZATION ON;

${HASH\_MAINT}CONFIGURE CONTROLFILE AUTOBACKUP ON;

${HASH\_MAINT}CONFIGURE CONTROLFILE AUTOBACKUP FORMAT FOR DEVICE TYPE DISK TO '${BACKUPLOC}/%F';

${HASH\_MAINT}CONFIGURE SNAPSHOT CONTROLFILE NAME TO '${ORACLE\_HOME}/dbs/snapcf\_${ORACLE\_SID}.f';

## Avoid Deleting archivelogs NOT yet applied on the standby: [When FORCE is not used]

#CONFIGURE ARCHIVELOG DELETION POLICY TO APPLIED ON ALL STANDBY;

# Maintenance Section:

# -------------------

## Crosscheck backups/copied to check for expired backups which are physically not available on the media:

${HASH\_MAINT}crosscheck backup completed before 'sysdate-${BKP\_RETENTION}' device type disk;

${HASH\_MAINT}crosscheck copy completed before 'sysdate-${BKP\_RETENTION}' device type disk;

## Report & Delete Obsolete backups which don't meet the RETENTION POLICY:

${HASH\_MAINT}REPORT OBSOLETE RECOVERY WINDOW OF ${BKP\_RETENTION} DAYS device type disk;

${HASH\_MAINT}DELETE NOPROMPT OBSOLETE RECOVERY WINDOW OF ${BKP\_RETENTION} DAYS device type disk;

## Delete All EXPIRED backups/copies which are not physically available:

${HASH\_MAINT}DELETE NOPROMPT EXPIRED BACKUP COMPLETED BEFORE 'sysdate-${BKP\_RETENTION}' device type disk;

${HASH\_MAINT}DELETE NOPROMPT EXPIRED COPY COMPLETED BEFORE 'sysdate-${BKP\_RETENTION}' device type disk;

## Crosscheck Archivelogs to avoid the backup failure:

${HASH\_MAINT}CHANGE ARCHIVELOG ALL CROSSCHECK;

${HASH\_MAINT}DELETE NOPROMPT EXPIRED ARCHIVELOG ALL;

## Delete Archivelogs older than ARCH\_RETENTION days:

${HASH\_MAINT}DELETE NOPROMPT archivelog all completed before 'sysdate -${ARCH\_RETENTION}';

# Full Backup Script starts here: [Compressed+Controlfile+Archives]

# ------------------------------

run{

allocate CHANNEL DEVICE TYPE DISK FORMAT '+BACKUP/bawdb/%U';

sql 'alter system archive log current';

BACKUP ${COMPRESSED\_BKP}

#MAXSETSIZE ${MAX\_BKP\_PIECE\_SIZE}

NOT BACKED UP SINCE TIME 'SYSDATE-2/24'

INCREMENTAL LEVEL=0

FORMAT '${BACKUPLOC}/%d\_%t\_%s\_%p.bkp'

FILESPERSET 100

TAG='FULLBKP'

DATABASE include current controlfile PLUS ARCHIVELOG NOT BACKED UP SINCE TIME 'SYSDATE-2/24';

## Backup the controlfile separately:

BACKUP ${COMPRESSED\_BKP} CURRENT CONTROLFILE FORMAT '${BACKUPLOC}/CTL\_%d\_%t\_%s\_%p.bkp' TAG='CONTROLFILE\_BKP' REUSE ;

## Trace backup of Controlfile & SPFILE:

##SQL "ALTER DATABASE BACKUP CONTROLFILE TO TRACE AS ''${BACKUPLOC}/controlfile.trc'' REUSE";

##SQL "CREATE PFILE=''${BACKUPLOC}/init${ORACLE\_SID}.ora'' FROM SPFILE";

}

EOF